IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claim 16, AMEND claims 4 and 15, and ADD claim 17 in accordance with the following:

1-3. (cancelled)

4. (currently amended) An optical transmission system, comprising:

a bi-directional transmission line including [[a]] first and second optical transmission lines; and

a plurality of Raman amplifiers positioned on the bi-directional transmission line, each of the Raman amplifiers including an optical device to multiplex a plurality of pump lights to produce multiplexed light and to guide the multiplexed light to both of the first and second optical transmission lines to amplify optical signals on both of the first and second optical transmission lines so that when power of a first pump light, having a first wavelength, among the plurality of pump lights drops to at most a predetermined level in a first Raman amplifier among said plurality of Raman amplifiers, power of a second pump light having a second wavelength substantially equal to the first wavelength is raised in both a second Raman amplifier located next to the first Raman amplifier on a first side and a third Raman amplifier located next to the first Raman amplifier on a second side.

5. (previously presented) An optical transmission system, comprising:

a bi-directional transmission line including a first and second optical transmission lines; and

a plurality of Raman amplifiers positioned on the bi-directional transmission line, each of the Raman amplifiers including an optical device to multiplex a plurality of pump lights to produce multiplexed light and to guide the multiplexed light to both of the first and second optical transmission lines to amplify optical signals on both of the first and second optical transmission lines so that when power of a first pump light, having a first wavelength, among the plurality of pump lights drops to at most a predetermined level in a first Raman amplifier among said

plurality of Raman amplifiers, power of a second pump light having a wavelength adjacent to the first wavelength is raised in both a second Raman amplifier located next to the first Raman amplifier on a first side and a third Raman amplifier located next to the first Raman amplifier on a second side.

6-10. (cancelled)

11. (previously presented) The optical transmission system according to claim 4,

wherein each optical transmission line accommodates "m" optical fibers, and

wherein each of said Raman amplifiers includes a multiplexer multiplexing "m" pump lights having different wavelengths to provide a multiplexed pump light to each of the "m" optical fibers.

12. (previously presented) The optical transmission system according to claim 4,

wherein each optical transmission line accommodates "m" optical fibers, and

wherein each of the Raman amplifiers comprises a multiplexer having "m" input ports and "m" output ports, each of the "m" input ports receiving a polarization-coupled light, obtained by polarization-coupling two pump lights,, the multiplexer multiplexes the polarization-coupled lights input via the "m" input ports, and providing a multiplexed light to the "m" optical fibers.

13. (previously presented) The optical transmission system according to claim 4,

wherein each of the Raman amplifiers comprises a multiplexer multiplexing a plurality of pump lights, and providing a multiplexed pump light to said optical transmission line, and

wherein said optical transmission system uses a plurality of multiplexers selected and arranged so that an average of at least one characteristic of the multiplexers in a predetermined number of Raman amplifiers has a predetermined value in each group of the predetermined number of Raman amplifiers and the power of the pump lights is raised in the predetermined number of Raman amplifiers.

15. (currently amended) An optical transmission method with which a plurality of Raman amplifiers are positioned on a bi-directional optical transmission line between a first optical terminal station and a second optical terminal station, each of the Raman amplifiers using a plurality of pump lights, comprising:

obtaining information regarding power of each of the pump lights in the Raman amplifiers at the first optical terminal station;

transmitting, when power of a first pump light, having a first wavelength, among the pump lights drops to at most a predetermined level in a first Raman amplifier among the Raman amplifiers, a control signal for raising power of a second pump light having a second wavelength substantially equal to the first wavelength, from the first optical terminal station to at least one of the Raman amplifiers on each side of the first Raman amplifier;

adjusting the second pump light in accordance with the control signal in the at least one of the Raman amplifiers on each side of the first Raman amplifier;

multiplexing the pump lights to produce multiplexed light; and

guiding the multiplexed light to both of the first and second optical transmission lines.

16. (canceled)

17. (new) The optical transmission system according to claim 4, wherein each of said Raman amplifiers includes:

a pair of variable attenuators attenuating the multiplexed light to be guided to both of the first and second optical transmission lines;

a pair of detectors detecting optical powers of the optical signals on both of the first and second optical transmission lines; and

a controller controlling the pair of variable attenuators based on the optical powers detected by said pair of detectors.